OIPE JC81
MAY 20 2005
PATENT & TRADEMARK OFFICE

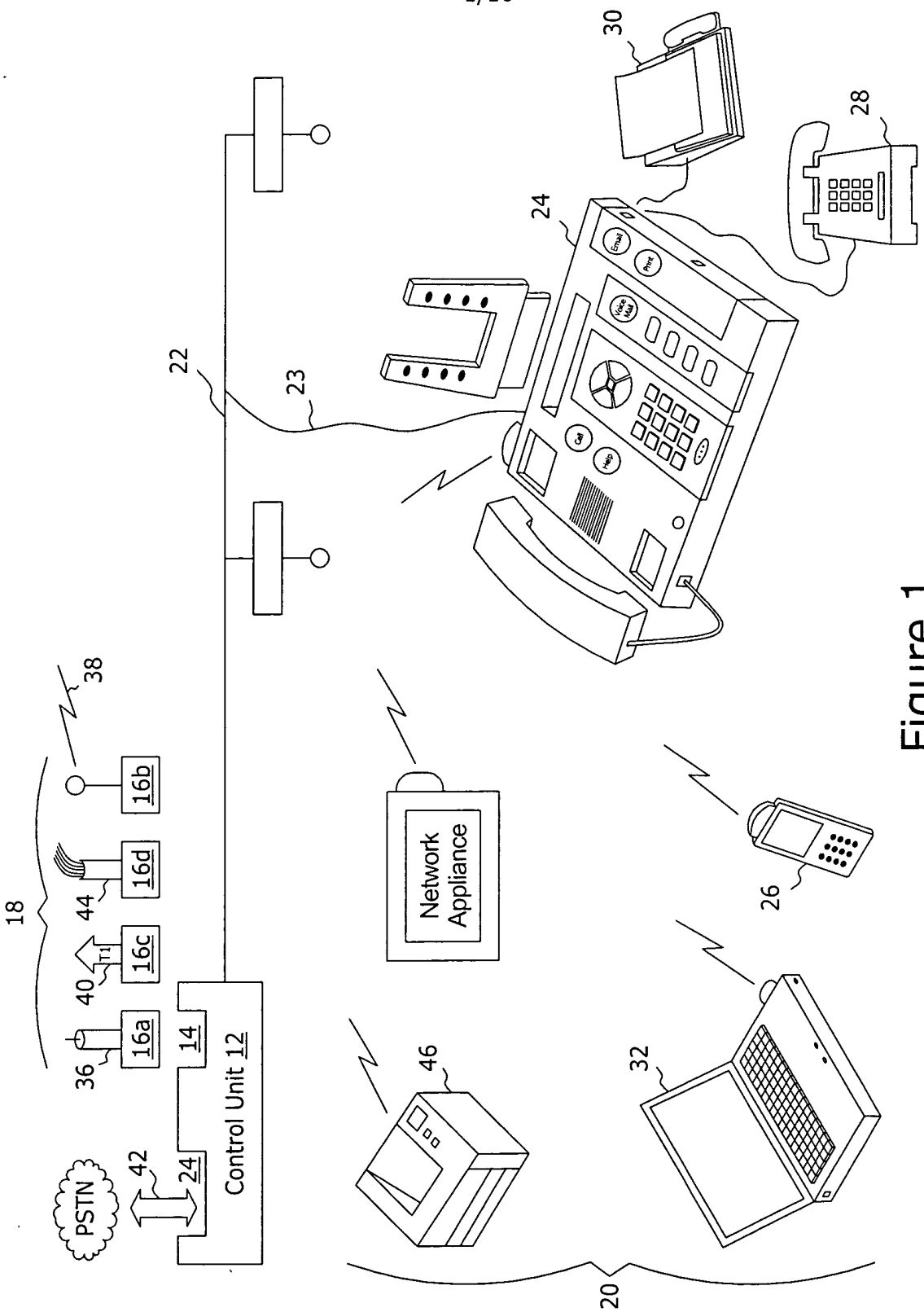

Figure 1

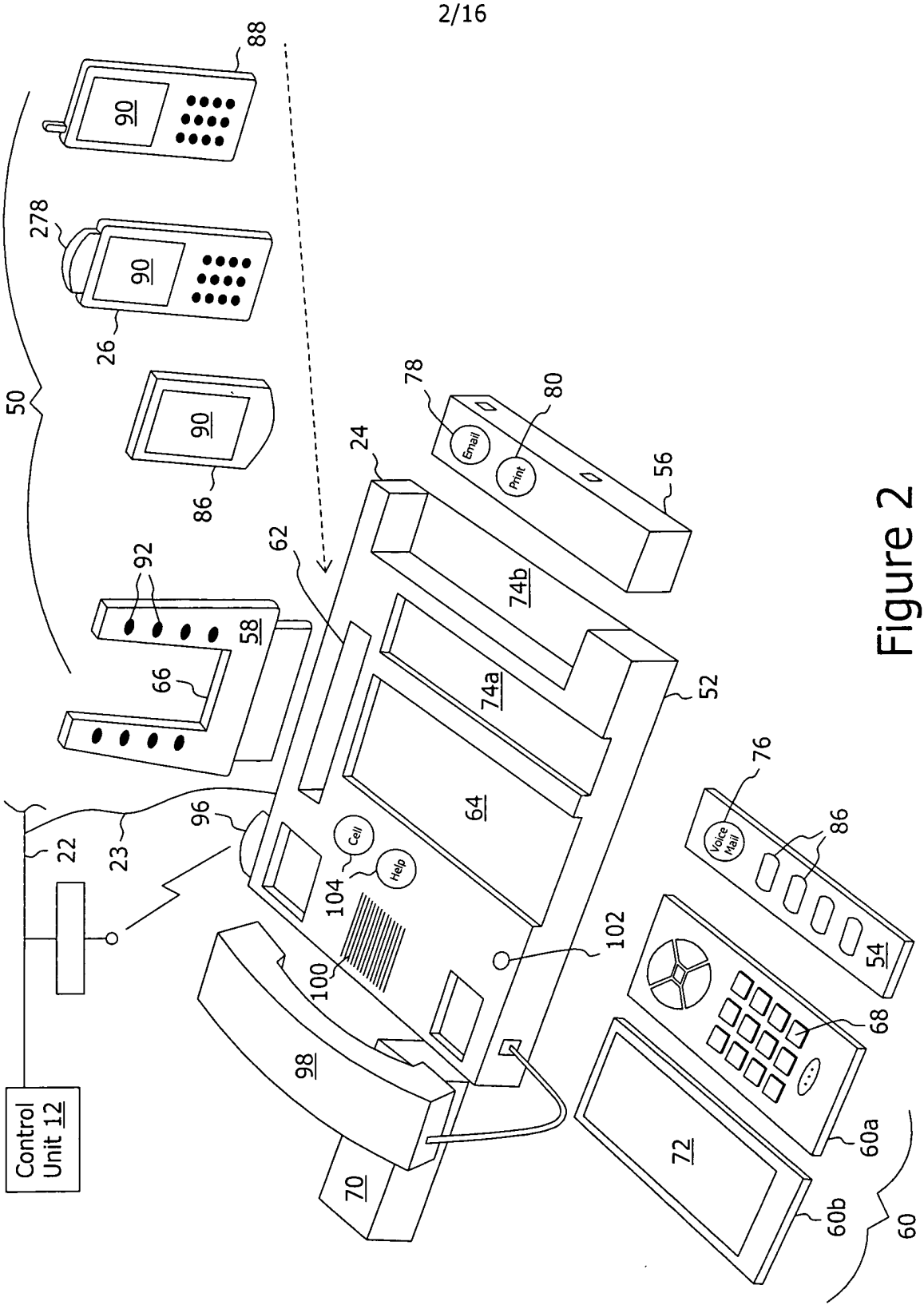
88
90
278
90
26
90
86
50
78
Email
80
Print
24
56
62
92
58
74b
66
74a
52
64
76
Voice Mail
86
54
96
22
23
Cell
Help
104
102
100
68
98
72
60a
60b
60
70
Control Unit 12

Figure 2

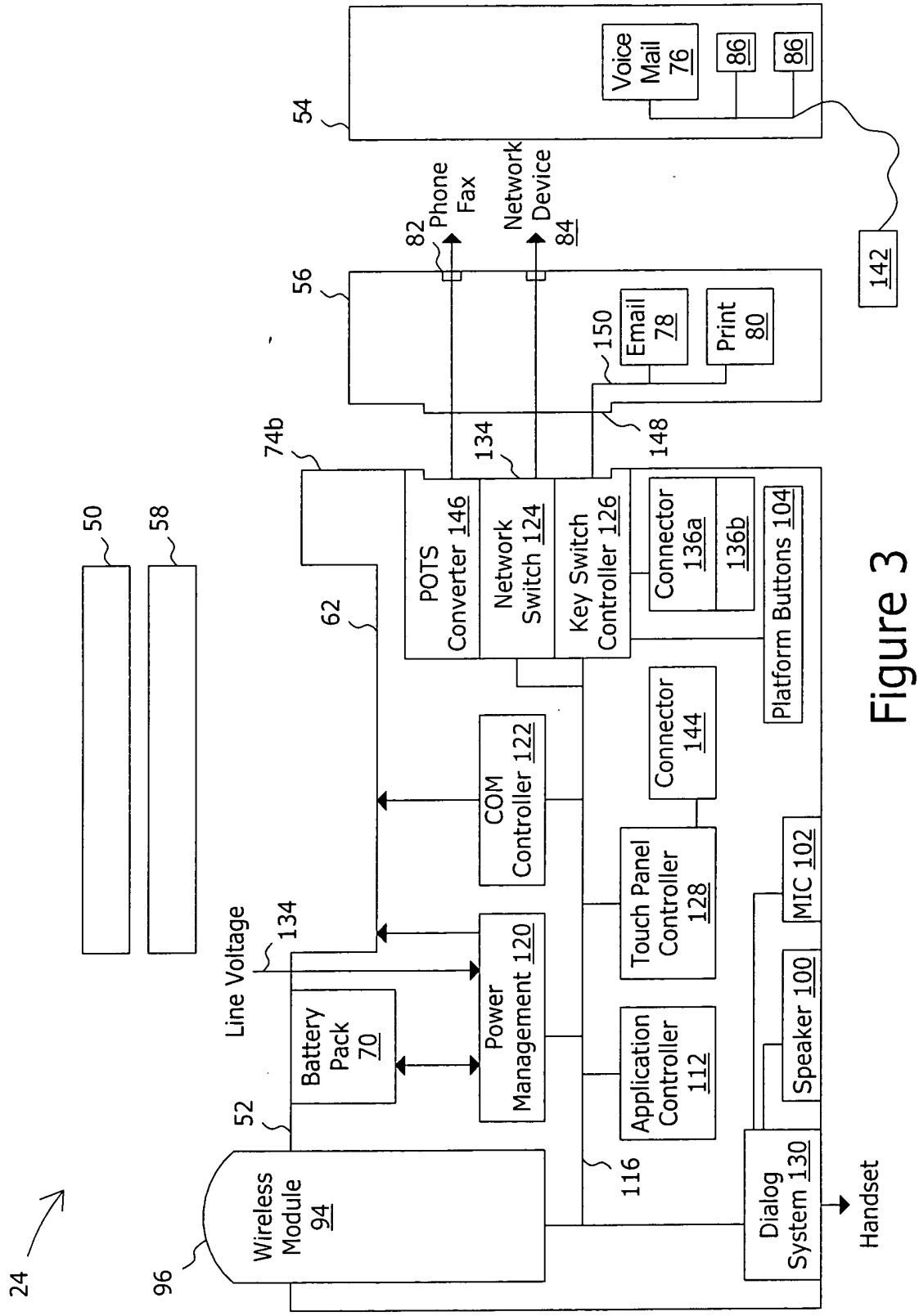
24
96
Wireless Module 94
52
Battery Pack 70
Line Voltage
134
Power Management 120
COM Controller 122
62
50
58
74b
POTS Converter 146
Network Switch 124
Key Switch Controller 126
134
148
Connector 136a
136b
Platform Buttons 104
Connector 144
Touch Panel Controller 128
Application Controller 112
116
MIC 102
Speaker 100
Dialog System 130
Handset
56
150
Email 78
Print 80
82 Phone Fax
Network Device 84
54
Voice Mail 76
86
86
142

Figure 3

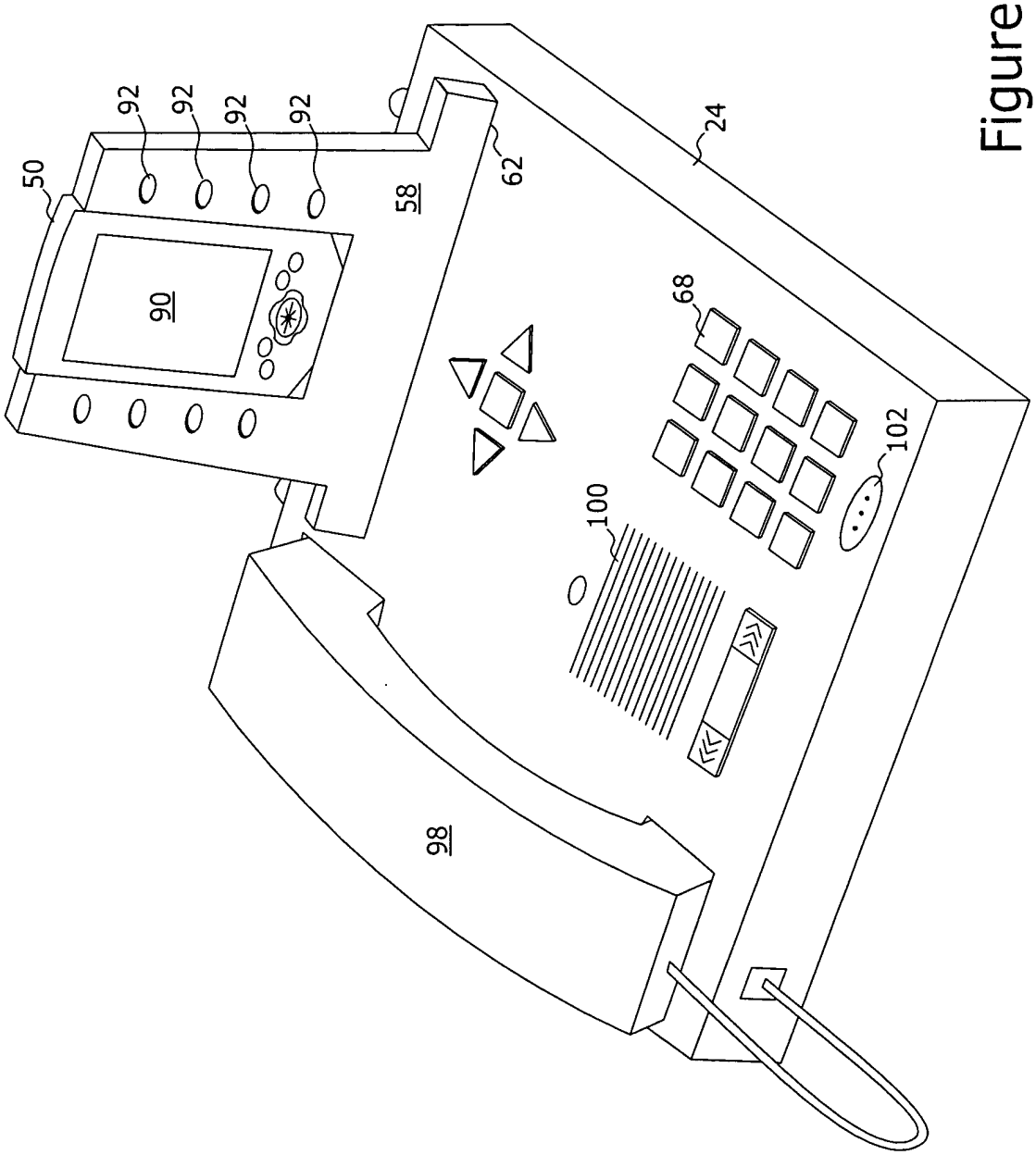

Figure 4a

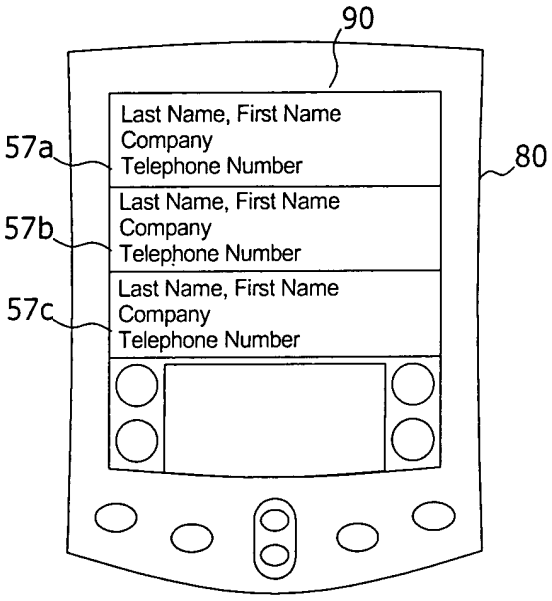
90
Last Name, First Name
Company
Telephone Number
57a
Last Name, First Name
Company
Telephone Number
57b
Last Name, First Name
Company
Telephone Number
57c
80

Figure 4b

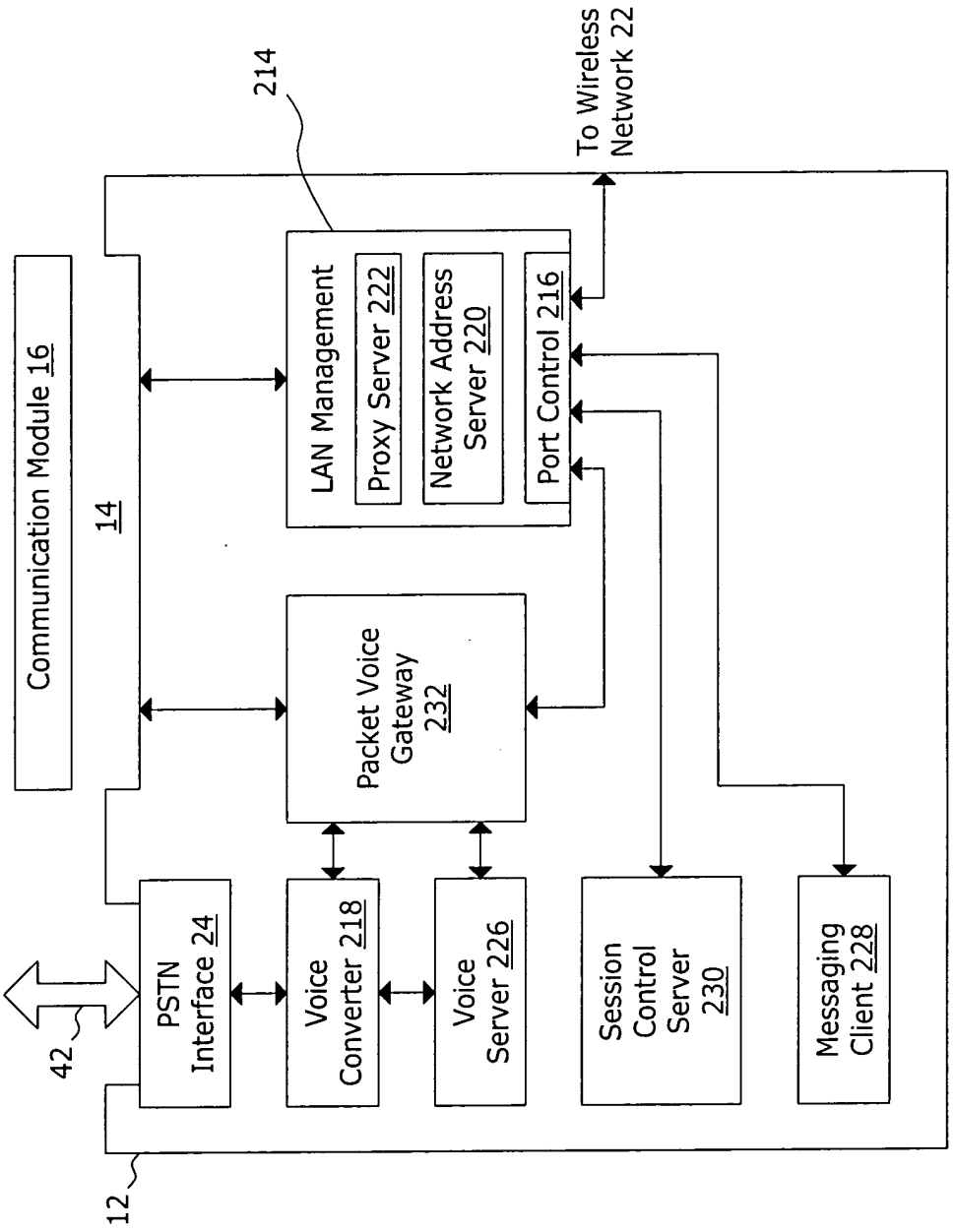
214
To Wireless Network 22
Communication Module 16
14
LAN Management
Proxy Server 222
Network Address Server 220
Port Control 216
Packet Voice Gateway 232
PSTN Interface 24
Voice Converter 218
Voice Server 226
Session Control Server 230
Messaging Client 228
42
12

Figure 5

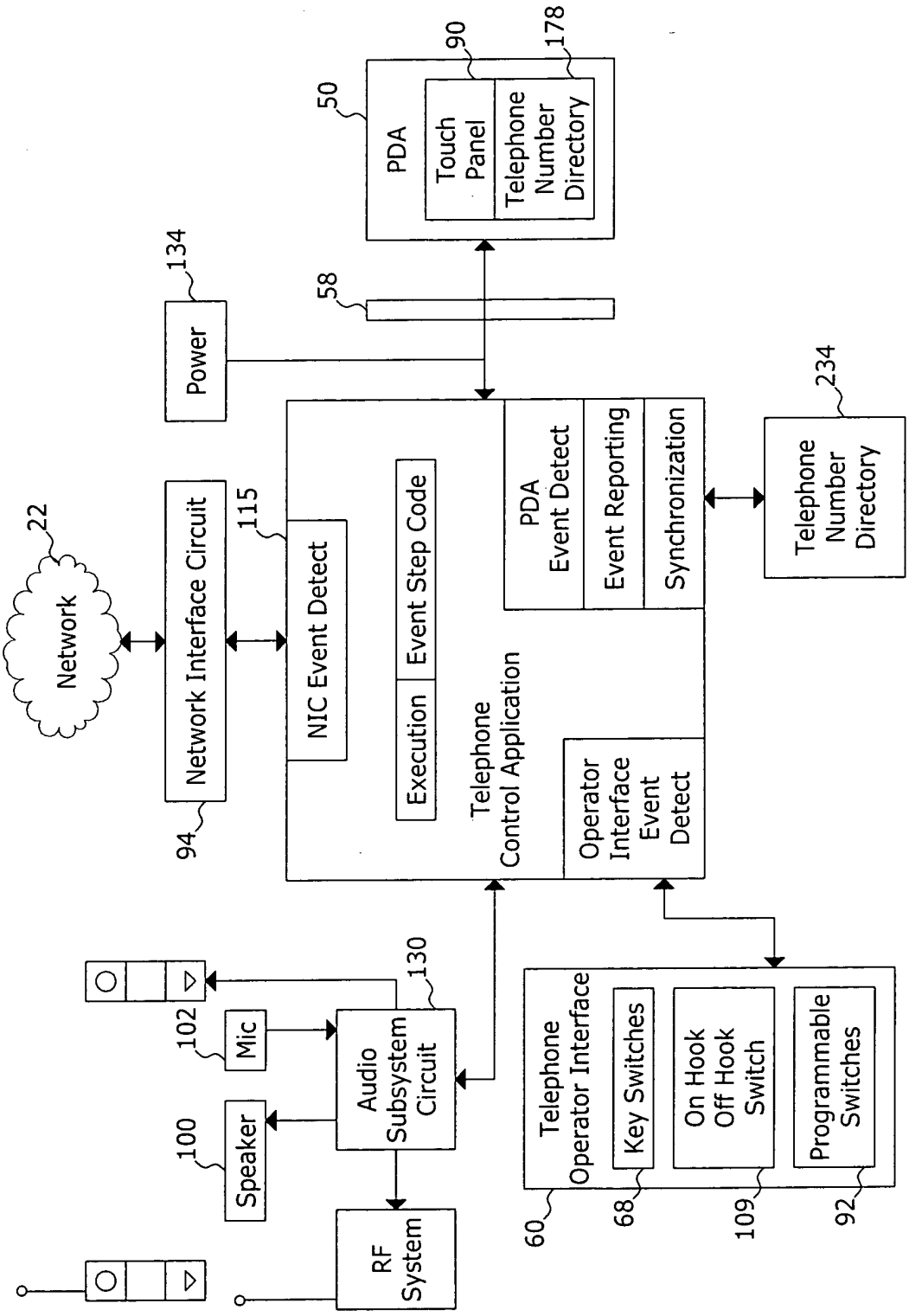
PDA
Touch Panel
Telephone Number Directory
50
90
178
58
Power
134
Network
22
Network Interface Circuit
94
115
NIC Event Detect
Execution
Event Step Code
Telephone Control Application
PDA Event Detect
Event Reporting
Synchronization
Operator Interface Event Detect
Telephone Number Directory
234
Mic
102
Speaker
100
Audio Subsystem Circuit
130
RF System
Telephone Operator Interface
Key Switches
On Hook Off Hook Switch
Programmable Switches
60
68
109
92

Figure 6

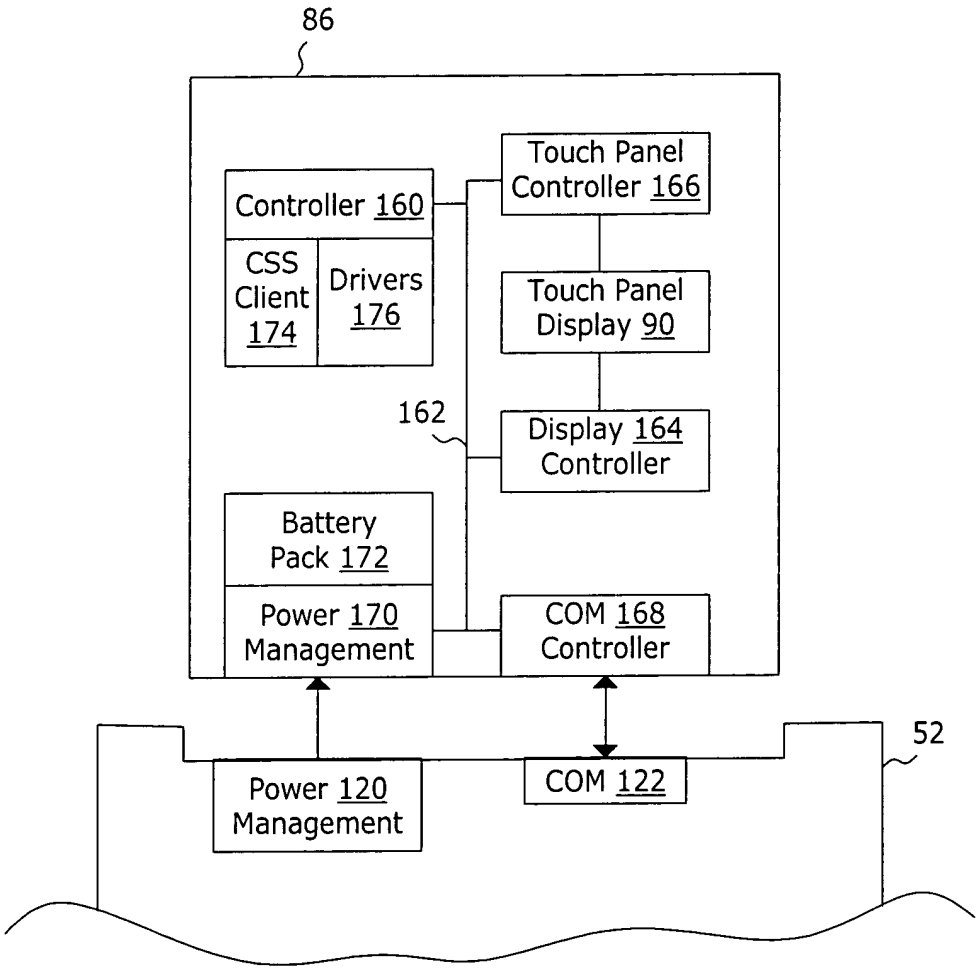
86
Controller 160
CSS Client 174
Drivers 176
Touch Panel Controller 166
Touch Panel Display 90
162
Display 164 Controller
Battery Pack 172
Power 170 Management
COM 168 Controller
52
Power 120 Management
COM 122

Figure 7

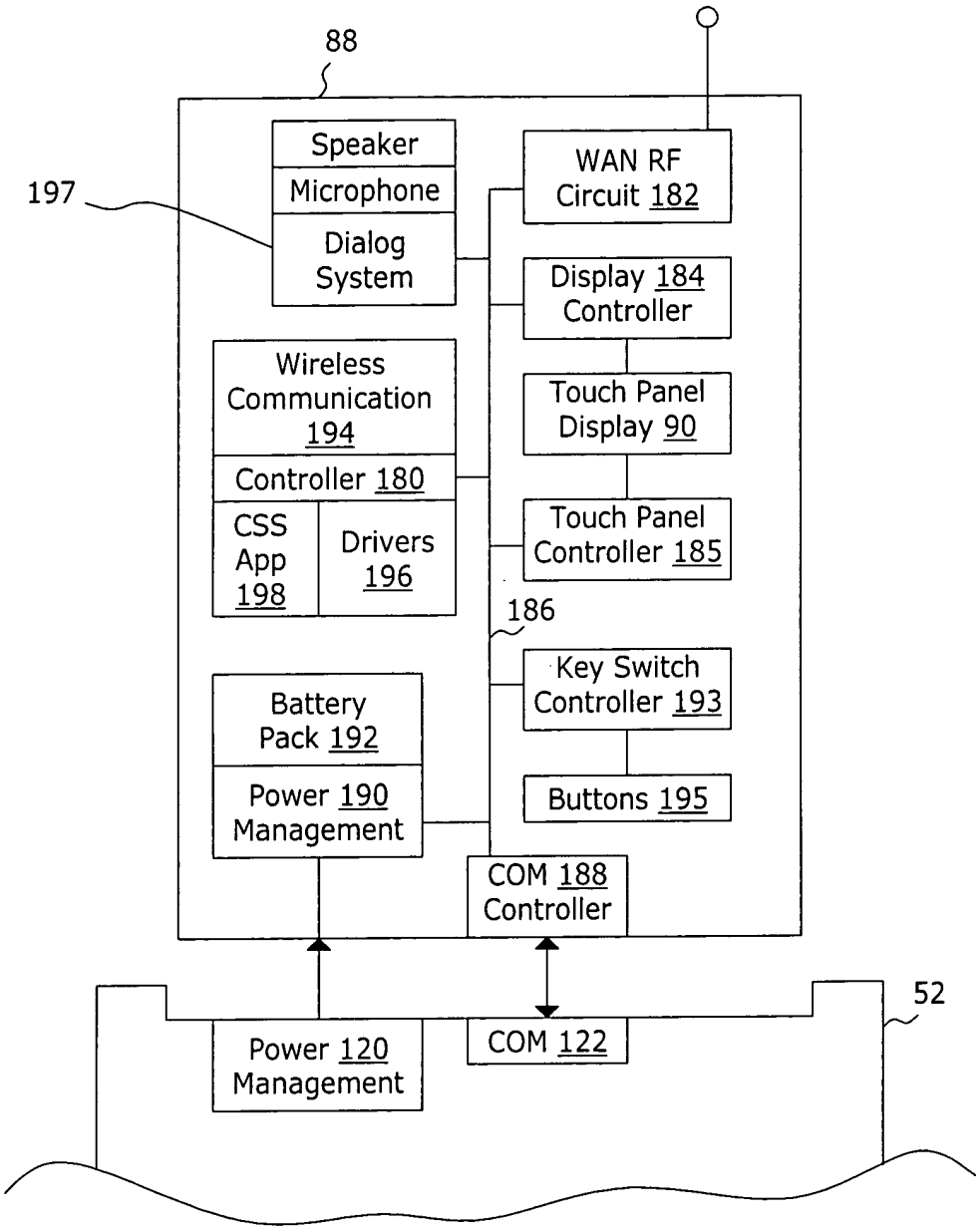
88
197
Speaker
Microphone
Dialog System
WAN RF Circuit 182
Display 184 Controller
Wireless Communication 194
Controller 180
CSS App 198
Drivers 196
Touch Panel Display 90
Touch Panel Controller 185
186
Key Switch Controller 193
Battery Pack 192
Power 190 Management
Buttons 195
COM 188 Controller
52
Power 120 Management
COM 122

Figure 8

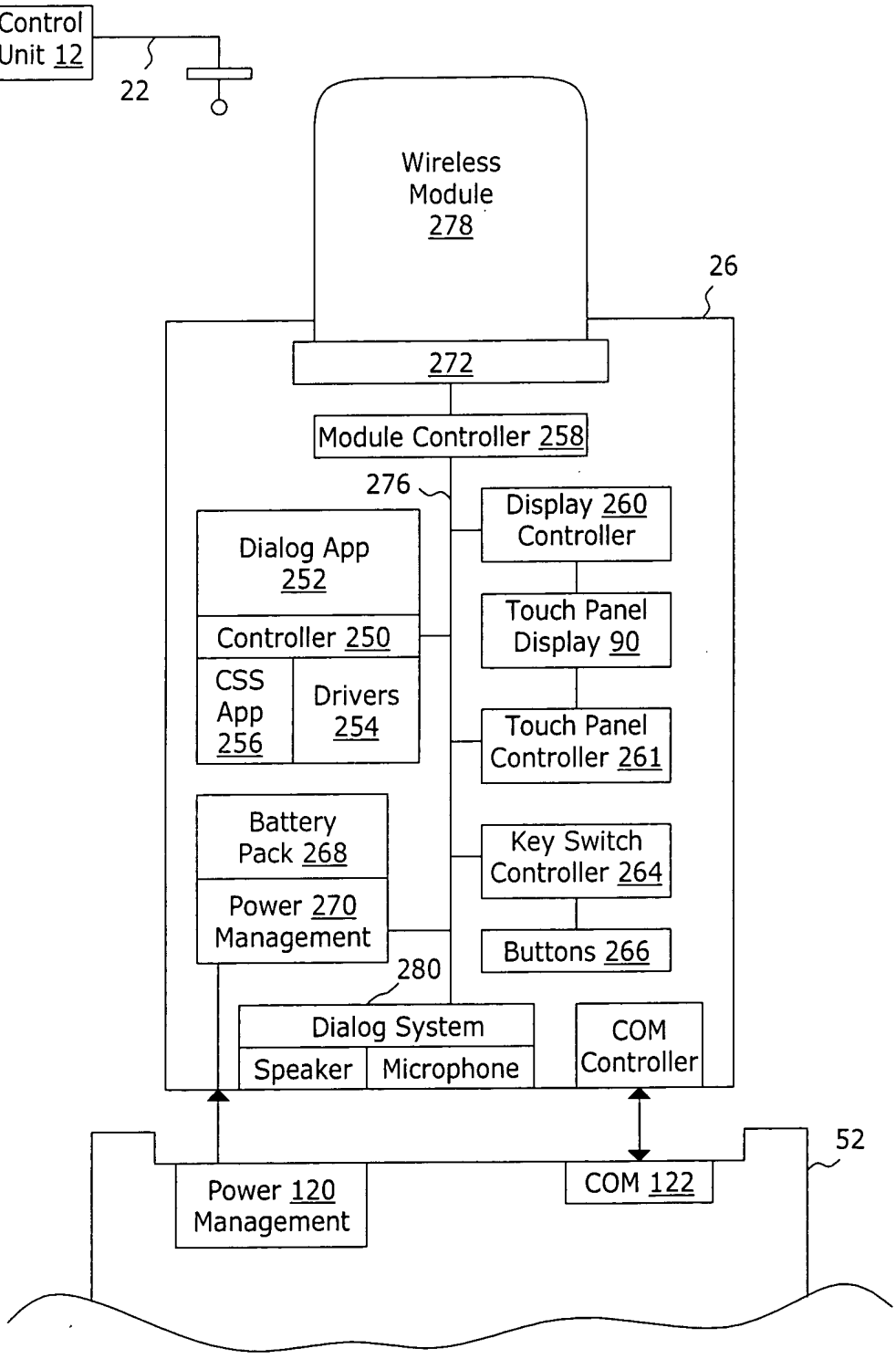
Control Unit 12
22
Wireless Module 278
26
272
Module Controller 258
276
Display 260 Controller
Dialog App 252
Controller 250
CSS App 256
Drivers 254
Touch Panel Display 90
Touch Panel Controller 261
Battery Pack 268
Power 270 Management
Key Switch Controller 264
Buttons 266
280
Dialog System
Speaker
Microphone
COM Controller
52
Power 120 Management
COM 122

Figure 9

Start Up State - Waiting for Events	
Events	Steps
Open Session Request on Predetermined Port	· Establish New Local Communication Device State Machine · Establish Session · Send Logon Control Scripts · Get CSS Interface Configuration · Provide Main Menu Display Content · Provide Main Menu Layout Control · Go to Main Menu State

300

Figure 10a

304

Main Menu State - Waiting for Events	
Events	Steps
Menu Selection	· Go To Selected State
Initialize Subscriber Device	· Send ID Extraction Control Scripts · Get Subscriber Device ID · Update Network Location Table · Synchronize Subscriber Contact Directory · Provide Initial Display Content (Main Menu) · Provide Display Layout Control · Go To Subscriber Device Main Menu State
Help Request	· Set Up Audio Session Channel · To Audio Help CCS · Go To Audio Help State

302

308

310

Figure 10b

316

Subscriber Device Main Menu State - Waiting for Events	
Events	Steps
312 Menu Selection	· Go To Selected State
320 Help Request	· Provide Help Menu Display Content · Provide Help Menu Display Layout Control · Go To Graphic Help State
322 Message Request	· Get Messages from Remote System · Sort Messages by Type · Provide Message List Content · Provide Message List Layout Control · Go To Message List State
324 Audio Message Request	
314 Directory Request	· Provide Directory Content and Layout Control · Transition to Subscriber Directory State
326 Subscriber Device Remove	· Go To Main Menu State

Figure 10c

328

Message List State - Waiting for Events	
Events	Steps
334 Audio Message Select	· Send Audio File to CSS · Provide Processing Script to Output File · Go To Audio Session State
336 Message Select	· Provide Message Display Content · Provide Message Display Layout Control · Go To Message Display State
338 Message Print	· Format Message Content for Printer · Send Message File to Printer · Go To Message List State
340 Help Request	· Provide Help Menu Display Content and Display Layout Control · Go To Graphic Help State
342 Subscriber Device Remove	· Go To Main Menu State

Figure 10d

370

Subscriber Directory State - Waiting for Events	
Events	Steps
372 Receive Contact Selection	· Provide Control Script to Setup Audio Session with Contact · Provide Audio Session Display Content and Layout Control · Transition to Audio Session State
374 Help Request	· Provide Help Menu Display Content and Display Layout Control · Go To Graphic Help State
378 Subscriber Device Remove	· Go To Main Menu State

Figure 10e

344

Base State - Waiting for Events	
Events	Steps
354 Touch Panel	· Report Touch Panel Event to Controller · Return to Base State
356 Subscriber Interface Control Button	· Report Button Activation to Controller and PVA · Return to Base State
358 Receive Display Content and Layout Control Messages	· Update Display · Return to Base State
360 Receive Processing Script	· Process Script · Return to Base State
362 WAN Telephone Signal	· Go To WAN State
364 Detect Subscriber Device	· Send Initialize Subscriber Message · Return to Base State
350 Receive Messages from Controller Directed to Subscriber Device	· Relay Messages to Subscriber Device
352 Receive Messages from Subscriber Device Directed to Controllers	· Relay Messages to Controller

346 Start Up - Waiting for Events	
Events	Steps
366 Network Connection	· Session Request to Control Unit
368 Receive Logon Script	· Process Logon Script · Provide Interface Configuration · Go To Base State

Figure 11

380

Standby State - Waiting for Events	
Events	Steps
388 Audio Session Signal from Packet Voice Gateway	· Transition to Call Signalling State · Report State Transition to CSS Application
390 Subscriber Interface Control (Off Hook)	· Transition to Off Hook State · Report State Transition to CSS Application
392 Session Setup Event from CSS Application	· Send Call Signalling Message to Gateway · Transition to Call Signalling State · Report Transition to CSS

382

Call Signaling State - Waiting for Events	
Events	Steps
394 On Hook Event	· Return to Standby State · Report State Transition to CSS Application
396 Termination of Signalling	· Return to Standby State · Report State Transition to CSS Application
398 Ready for Audio Session	· Transition to Audio Session State · Report State Transition to CSS Application

Figure 12a

384

Off Hook State - Waiting for Events	
Events	Steps
400 Subscriber Interface Control (Key Pad Activation) from CSS Application	· Generate DTMF Tone
402 Validation of Number Sequence	· Send Call Signalling Messages to Gateway · Transition to Call Signalling State · Report Transition to CSS Application
404 Subscriber Interface Control (On Hook)	· Return to Standby State

386

Audio Session State - Waiting for Events	
Events	Steps
406 Termination of Audio Session	· Return to Off Hook State
408 Subscriber Interface Control (Keypad Activation)	· Generate DTMF Tone
410 Subscriber Interface Control (On Hook) from CSS Application	· Return to Standby State

Figure 12b